

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Ralph E. Gosney

GENERAL INFORMATION:

| | |
|----------------------------|--|
| Name: | Trus Joist, A Weyerhaeuser Business |
| Address: | 610 Trus Joist Lane, Chavies, KY 41727 |
| Date application received: | February 20, 2004 |
| SIC/Source description: | 2493/Reconstituted Wood Products |
| EIS #: | 21-193-00097 |
| Application log number: | 56351 |
| Permit number: | V-03-008 R2 |

APPLICATION TYPE/PERMIT ACTIVITY:

| | |
|---|--|
| <input type="checkbox"/> Initial issuance | <input type="checkbox"/> General permit |
| <input checked="" type="checkbox"/> Permit modification | <input type="checkbox"/> Conditional major |
| __Administrative | <input checked="" type="checkbox"/> Title V |
| __Minor | <input checked="" type="checkbox"/> Synthetic minor |
| <input checked="" type="checkbox"/> Significant | <input type="checkbox"/> Operating |
| <input type="checkbox"/> Permit renewal | <input checked="" type="checkbox"/> Construction/operating |

COMPLIANCE SUMMARY:

| | |
|---|---|
| <input type="checkbox"/> Source is out of compliance | <input type="checkbox"/> Compliance schedule included |
| <input checked="" type="checkbox"/> Compliance certification signed | |

APPLICABLE REQUIREMENTS LIST:

| | | |
|--|---|---|
| <input type="checkbox"/> NSR | <input checked="" type="checkbox"/> NSPS | <input checked="" type="checkbox"/> SIP |
| <input type="checkbox"/> PSD | <input checked="" type="checkbox"/> NESHAPS | <input type="checkbox"/> Other |
| <input type="checkbox"/> Netted out of PSD/NSR | <input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b) | |

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

| Pollutant | Maximum Emissions without permitted restrictions (tpy) | Title V Emission Potential (tpy) |
|-----------------------------------|--|----------------------------------|
| CO | 406 | 225 |
| NO _x | 360 | 225 |
| PM | 327 | 225 |
| PM ₁₀ | 327 | 225 |
| SO ₂ | 11.9 | 11.9 |
| VOC | 187 | 187 |
| MDI | 3.56 | 3.56 |
| Acetaldehyde | 4.40 | 4.40 |
| Acrolein | 4.70 | 4.70 |
| Formaldehyde | 10.97 | 10.97 |
| Methanol | 8.74 | 8.74 |
| Phenol | 7.41 | 7.41 |
| Propionaldehyde | 1.08 | 1.08 |
| Arsenic and arsenic compounds | 0.00 | 0.00 |
| Cadmium and cadmium compounds | 0.00 | 0.00 |
| Chromium and chromium compounds | 0.00 | 0.00 |
| HCl | 20.60 | 20.60 |
| HF | 0.00 | 0.00 |
| Lead compounds | 0.00 | 0.00 |
| Manganese and manganese compounds | 0.09 | 0.09 |
| Mercury and mercury compounds | 0.00 | 0.00 |
| Nickel and nickel compounds | 0.01 | 0.01 |

SOURCE DESCRIPTION:

An application for a major revision to Permit V-03-008 R1 was received on February 20, 2004. The revision includes the replacement of (4) strand dryers with (2) new proposed strand dryers. Process modifications will also be made to make maximum use of the energy input to the system by recovering heat in the thermal oil heater exhaust gases by routing it through the (2) new proposed strand dryers.

The existing facility is a major source (greater than 100 tons of potential emissions) of carbon

monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), and volatile organic compounds (VOC). After the proposed modifications, the facility will also be a major source (greater than 25 ton of total potential emissions) of hazardous air pollutants (HAPs). The facility will be subject to the US EPA proposed national emission standards for hazardous air pollutants (NESHAP) for Plywood and Composite Wood Products (40 CFR 63 Subpart DDDD). The facility will also become subject to the US EPA NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Subpart DDDDD).

The Title V operating permit, V-03-008, was issued on July 2, 2003. Prior to the Title V operating permit, the facility operated under permit numbers C-93-111 revision 2, S-96-256, S-97-033, and the most recent VS-02-008.

SOURCE PROCESS DESCRIPTION:

The plant consumes more than 200,000 cords of “low grade” timber annually for use in the manufacture of Laminated Strand Lumber (LSL), Timber Strand and Trus Joist wood I-joists. The LSL process includes whole logs (debarked), cut in length, and processed into thin, long strands. The strands are then dried, coated with polyurethane methylene biphenyl isocyanate (MDI) resin, and formed into a rough billet. Lastly, the billet is pressed into a billet approximately 8-feet wide by 48-long and several inches thick using steam injection technology. The general processing runs through the log and strand preparation, heating/energy, blending-forming-press, and finishing areas, which is tied to the Trus Joist production department.

EMISSION AND OPERATING CAPS DESCRIPTION:

As a self imposed restriction to preclude the applicability of 401 KAR 51:017, emission of carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns (PM₁₀), and nitrogen oxides (NO_x) emissions from all non-fugitive sources shall not exceed 225 tons each, during any consecutive twelve (12) month rolling total. To demonstrate compliance, the permittee shall maintain records of the monthly CO, PM, PM₁₀, and NO_x emissions from all non-fugitive sources, and summarize them on a 12-month rolling average.

Pursuant to 401 KAR 63:021, source-wide emissions of MDI shall not exceed 1.45 lb/hr. To demonstrate compliance, emissions of MDI will be controlled by the particulate matter controls as stated for each emission unit in Section B of permit V-03-008 R2. Controls shall be operated as necessary to maintain compliance with the permitted emission limitation, in accordance with the manufacturer’s specifications and/or good engineering practices.

OPERATIONAL FLEXIBILITY: N/A